

CLAIMS

I claim:

1 1. Method of preventing machine damage in the event of a web break in a
2 web-fed rotary printing machine comprising a plurality of cylinders which, in a print-on
3 position, roll one on another, said printing machine further comprising a plurality of drive
4 motors for driving said cylinders, said method comprising

5 synchronizing the motors so that they are all driven at the same speed,
6 detecting when a web break occurs, and
7 braking said drive motors to a standstill by jerking stop when a web break
8 occurs.

1 2. Method according to claim 1 wherein said drive motors are braked to a
2 standstill within five revolutions when a web break occurs.

1 3. Method according to claim 2 wherein said drive motors are braked to a
2 standstill within two revolutions when a web break occurs.

3 4. Method as in claim 1 wherein said drive motors are braked by reversing
4 the effective direction of torque produced by the motors.

1 5. Method as in claim 1 wherein, during braking, said cylinders remain in
2 the print-on position.

1 6. The method of claim 1 wherein said motors are induction motors, said
2 motors being braked by overloading said motors.

1 7. Apparatus for preventing machine damage in the event of a web break in
2 a web-fed rotary printing machine having a plurality of cylinders which, in a print-on position,
3 roll one on another, said printing machine further comprising a plurality of drive motors for
4 driving said cylinders, said apparatus comprising

5 a control device for synchronizing the motors so that they are all driven at the
6 same speed, said control device having stored therein a control program which can be activated
7 in the event of a web break, said control program having therein an emergency stop ramp
8 which brakes said motors to a standstill by jerking stop, said program driving said motors
9 along said stop ramp in the event of a web break.

1 8. Apparatus as in claim 7 wherein each said cylinder is driven by a
2 respective said drive cylinder.

1 9. Apparatus as in claim 7 wherein each said cylinder is a built up
2 cylinder having a hollow center part.

1 10. Apparatus as in claim 7 wherein each said drive motor is an induction
2 motor.

1 11. Apparatus as in claim 7 wherein said control program drives motors
2 along said stop ramp by operating said motors in the overload range.

- 1 12. Apparatus as in claim 7 wherein said control program brakes said motors
- 2 by reversing the effective direction of torque produced by the motors.